The Tardiglacial and initial Holocene on the Charente-Maritime and Vendée Coasts: Status of Current Research and New Perspectives

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THE MESOLITHIC OF THE ATLANTIC FAÇADE: PROCEEDINGS OF THE SANTANDER SYMPOSIUM

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Abstract

This chapter gives a general overview of the Tardiglacial and early Holocene on the Charente and Vendée coasts, as well as the preliminary results of a collective research project focused on the lower Charente Basin and carried out in collaboration between the authors, regional French prehistorians and Spanish researchers working on the Cantabrian coast.

Introduction

The Mesolithic of Charente-Maritime has been relatively poorly studied, although two recent French publications summarize much of what is available through the late 1990s (Marchand 1999, Foucher et al. 2000). Our initial efforts consisted of assessing the state of research in Charente-Maritime and Vendée, recognizing the lack of information concerning the period between the end of the Würm and the beginning of the Holocene, and assembling what few data existed as compiled by various researchers in the region. This allowed us to map the distributions of known sites in the Charente and Seudre basins; it also resulted in the identification of about 20 previously unpublished sites (Fig. 7.1). The discovery of the Pierre Saint-Louis site during the salvage operation preceding the construction of highway A837 (we directed the second phase of this project) afforded us the unique opportunity to conduct research on a mesolithic open-air occupation surface with constructed hearths.

The second phase, which has already begun, includes continuation of surveys (ca. 40 sites recorded since the beginning of 1995) and the excavation of test pits at several sites with the goal of obtaining a significant stratigraphy that would permit establishment of a more complete, regional, chronological sequence (Figs. 7.2, 7.3).

The Geographic Context

Located in the northern part of the Aquitaine Basin, the Charente coast presents exposed sediments dating from the Jurassic Period in Aunis and Ile de Ré, and the Upper Cretaceous in the vicinity of Saintonge and Ile d'Oléron. At Aunis, the topography takes the form of low hills with crestlines at ca. 8 km inland from the present coast, following a SE/N arc. In the region of Saintonge, Cretaceous sediments include, on the one hand, two parallel crests which come to an end at Port-des-Barques and at Bourcefranc and, on the other, a scatter of small, dispersed islands in swampy terrain, some of which connect in a chain to make up the Arvert peninsula. The islands are of very low relief (about tree-level), in consequence of which they are scarcely visible, even up close, from the sea.

Oversimplifying somewhat, there are three major geographical characteristics of the Charente:

(1) *The sea:* The present day coastline exhibits occasional low cliffs, of friable limestones, subject to frequent landslides. Since the continental shelf extends far beyond the present shore, the coastline fluctuated several tens of kilometers from its present location during the Flandrian Transgression.

(2) *A hydrographic system* composed of the watersheds of the Seugne and the Charente basins.

(3) *The coastal marshes:* They consist of 'maritime plains', which are remarkably extensive and flat, varying between 1-4 m above sea level. The soil is composed entirely of *bri*, a fine clay of marine or fluvial origin. The plains were formed during the Holocene, and can be up to 15 or 20 m thick.

The Vendée coast offers a slightly different morphology because its geological substrate is composed of metamorphic rocks; the Breton Swamp occupies a significant portion of the coast.

Knowledge of these geographic units and their evolution over time is of great importance to an understanding

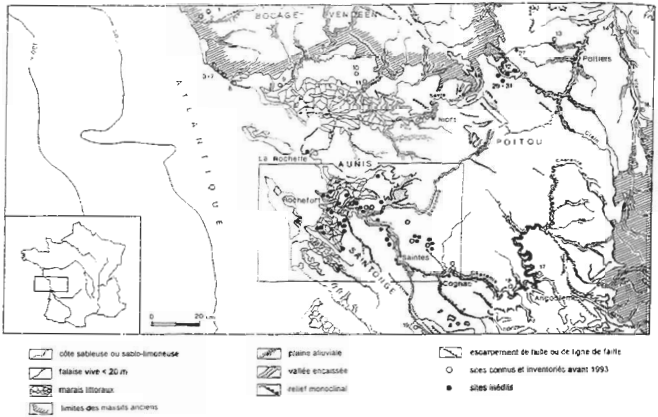

Figure 7.1. Map of the distribution of Epipaleolithic and Mesolithic sites along the Charente and Vendée coasts (based on the geomorphological map of France – scale 1:1000000). Sites known and inventoried before1993: 1 Coex, 2 L'Aiguillon, 3–7 Bel Air, St. Jean d'Orbestier (Le Château d'Olonne), Baie de Caillola, Anse du Corps de Garde, La Mine (Talmont St. Hilaire); 8 Pointe du Payré (Jard-sur-Mer), 9 St Benoit-sur-Mer, 10 Le Fief du Mitan (Petosse), 11 Les Sables de Loi (Auzay), 12 La Bouronnière, 13 La Grande Roche, 14 Le Gué St Mars, 15 Abri de Bellefonds, 16 Bois Ragot, 17 St. Genis d'Hiersac, 18 Garde Epée, 19 Heurtebise, 20 Les Parpaillons, 21 Bel Air, 22 La Sablière, 23 Abri Piphrez, 24 Maison Neuve, 25 L'Autrière, 26 Le Cloux. Unpublished sites 1993-94: 27 Vaulifier (Vasles), 28 Marconnay (Sanxay), 29–38 Le Moulin de Bois, Pouvreau, La Brouinière, L'Aurière, La Boutinière (Ménigoute); 32–34 Fontbelle, Chez Bonpain, Peu Deis (Villars-les-Bois); 35 Chez Chenard (Saint-Sulpice de C.), 36–40 La Brouisse, Chez Gautret, Les Prises, Chez Jouneau, La Garenne (Brizambourg); 41 Le Prieuré (St. Vaize), 42 Bois Leclerc (Port d'Envaux), 43 La Pierre St. Louis, 44 La Vigne à Jacques (Bords), 45–50 Le Buffant, La Grande Chauvinière, La Rabotellerie, L'Alaigne (Tonnay-Charente); 51 Bois des Sablières (Le Breuil Magné), 52 Le Tertre, 53–55 Champon, Les Brochins (St. Laurent de la P.), La Baronnière (Fouras); 56 Pougne (St. Nazaire), 57 Bois du Grand Parc (Soubise), 58 Moulin d'Angle (St. Agnant), 59–61 Le Creux de l'Orage, La Brumauderie, Le Godinet (Saint-Agnant); 62 Pièce de la Vache d'Oron (Le Château d'Oléron), 63 Le Fief Jardin (Marennes), 64 Tête du Grand Fief (Marennes), 65 Ile d'Hérablais (Hiers-Brouage), 66 La Châtaigneraie (Gripperie-St-Symphorien), 67 Champs du Marais du Port (Saujon).

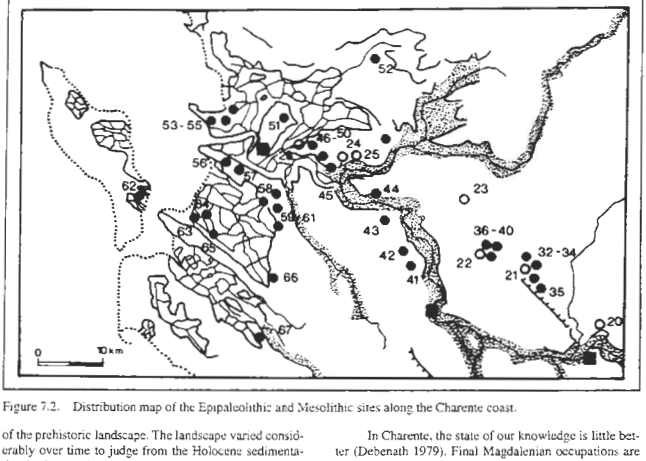

Figure 7.2. Distribution map of the Epipaleolithic and Mesolithic sites along the Charente coast.

of the prehistoric landscape. The landscape varied considerably over time to judge from the Holocene sedimentation in the marshes and valley floodplains, and from the evidence of marine transgression (Fig. 7.4). These changes must have entailed numerous modifications in the territories occupied and used by foragers, where they put their campsites, and the range of natural resources available to them.

State of Regional Research

The Final Magdalenian and Azilian

The Final Magdalenian/Azilian transition is well-defined in Vienne thanks to the stratigraphy of Bois Ragot (Gouex). According to ^{14}C dating, the transition spans the interval 11·8 kyr BP, and there was a progressive, continual evolution from the Final Magdalenian to the Azilian, without any signs of rupture (the ^{14}C date 8800 ± 220 BP for the Azilian level at Bois Ragot, however, seems very late (Chollet 1979). Nevertheless, for the region, and especially for the Vienne drainage, it constitutes the only stratified site to have been even partially published. As for the Final Magdalenian, the sites of Le Roc-aux-Sorciers (Angles-sur-l'Anglin), La Marche (Lussac), La Piscine (Montmorillon), and Le Chaffaud (Savigné) have not yet been fully published. Of these, we have only the information concerning the open air sites at our disposal, the subject of a critical review by the authors (Foucher & San Juan 1991, 1994).

In Charente, the state of our knowledge is little better (Debenath 1979). Final Magdalenian occupations are reported at the site of Montgaudier (Montbron) (Duport 1987) and at La Petite Courrière (Massaud et al. n.d.). The cave of Quéroy provides a stratigraphy which covers the period from the end of Dryas I to Dryas III. In the level corresponding to Dryas III, some Azilian points were recovered, but the site is primarily a paleontological locality without definable occupation surfaces (Tournepiche 1987). The nearest epipaleolithic occupations are in the Dordogne at Rochereil cave and at the Pont-d'Ambon rockshelterat Bourdeilles and, for the Final Magdalenian, at the sites of La Mairie and Le Mège at Teyjat.

In Charente-Maritime, if we are to take at face value the scant indications of LUP occupation, the Magdalenians would hardly ever have resided in the area. The site of Piphrez (Grandjean), which was unfortunately destroyed by the A10 highway in 1979, was the object of a few collections made after the bulldozers had passed (Blanchet & Rouveau 1986). The rockshelters of Heurtebise (Jonzac) produced a lithic assemblage which is probably Final Magdalenian. Because of the number of destructive disturbances that have affected these sites over the centuries (e.g., during the Middle Ages, World War II, clandestine diggers etc.), Gaillard was not able to recover any in situ material (1986, 1987). To find evidence of epipaleolithic occupations, one must look south to the Médoc, and to the lower Dordogne valley (Roussot-Larroque 1979, Lenoir 1979).

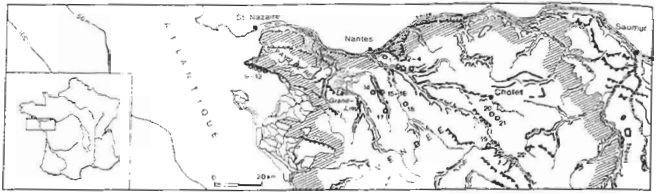

Figure 7.3. Distribution map of the Epipaleolithic and Mesolithic sites along the Vandée coast. 1 Les Cléons (Haute Goulaine), 2 Bégrolles, Guérivière (Haie Fouassière), 3 Le Breuil (Haie Fouassière), 4 La Haie Pallet (Mouzillon), 5–13 Pointe St. Gildas, Anse Sud, Préfailles II, Le Chatelet, L'Etang-Ouest, Biochon, Port aux Goths (Préfailles), La Girardière, Porteau-Ouest (Ste Marie), 14 Les Garennes (Geneston), 15–16 Les Etangs de la Brennière, Les Majoires (4 locus) (Montbert), 17 La Garne (Vieillevigne), 18 Senard (St. Hilaire de Loulay), 19 Chatelliers-Chateaumur, 20 La Plaine (Loublande), 21 Larsicot, Puy Albert, La Robière, Roche Allon (Moulins), 22 Puy Gayard (Pin).

The picture of the end of the Magdalenian and the Azilian in Poitou-Charente remains very sketchy because of the lack of information at our disposal and despite the potential importance of the archaeological heritage in the region.

The Mesolithic

The study of the origin and evolution of the cultural groups assembled under the generic term 'mesolithic' remains very problematic due to lack of publication and the absence of long stratigraphic sequences. The mesolithic of the region has always been considered either in relation to the late Upper Paleolithic (which latter represents the apogee of cultural evolution) or in relation to the Neolithic (in relation to which the mesolithic is seen as a development antecedent to the rearticulation of productive forces characteristic of the Neolithic). The mesolithic is rarely studied as a chronological and cultural entity in its own right. Radiocarbon dates are given in Table 7.1.

Massaud (1962, 1965) is credited with bringing to the attention of the profession the Sauveterrian occupation in the Charente at the sites of Cloux (Tonneay-Charente) and Maison-Neuve (Lussant), and for recognizing Garde-Epée (Saint-Brice) as the first Sauveterrian site in France. This site, published by Delamain (1914), consisted of material collected from a peat. It was also the focus of an excavation undertaken by the author. Grey and yellow sands, stratified under the peat, produced a lithic industry characterized by large blades, endscrapers, scalene and isosceles triangles, and triangular points with retouched bases (neither 'rhomboid', nor 'trapezes') that Delamain attributed to Breuil's 'Azilo-Tardenoisian', and that we consider today to be Middle Sauveterrian.

The two synthetic works which exist for this period are those of Joussaume (1981), which was part of a collected work under his direction - *Les Sites à Microlithes entre Vilaine et Marais Poitevin* (1984), and Perpère (1976). Despite their 'dated' quality, they remain important and complementary studies. The first surveys the coastal region from the south of Brittany to the Seugne estuary and the Charente (Charente-Maritime is partially covered); the second includes west-central France (Poitou-Charentes and the departments to the south of the Loire). The contribution of Fouéré (1991) adds little in the way of new information; it focuses more on the perspectives of prior investigators and the results that we might expect in this region.

Regional studies were conducted with greater frequency beginning in the 1960s by Tessier (Pays de Retz), and in the 1980s by Gourad (Bassin de Grand Lieu). Rozoy used some of these data in his massive synthetic work on mesolithic hunter-gatherers (1978). Based on the information provided in these studies, a preliminary discussion of the current state of research is possible.

The Early Mesolithic

The oldest mesolithic sites are in the Loire valley (Etangs de la Brenière, La Majoire D, La Garne) They are open sites attributed by Gourad to the Preboreal. The industry, gathered from surface collections, seems homogeneous from a chronological point of view and includes a range of types of which the most characteristic are scalene and isosceles triangles, and points (with and without retouched bases) (Figs. 7.5, 7.6). Nevertheless, each site has minor variations in the percentage representation of the different types. In addition, new types appear like the

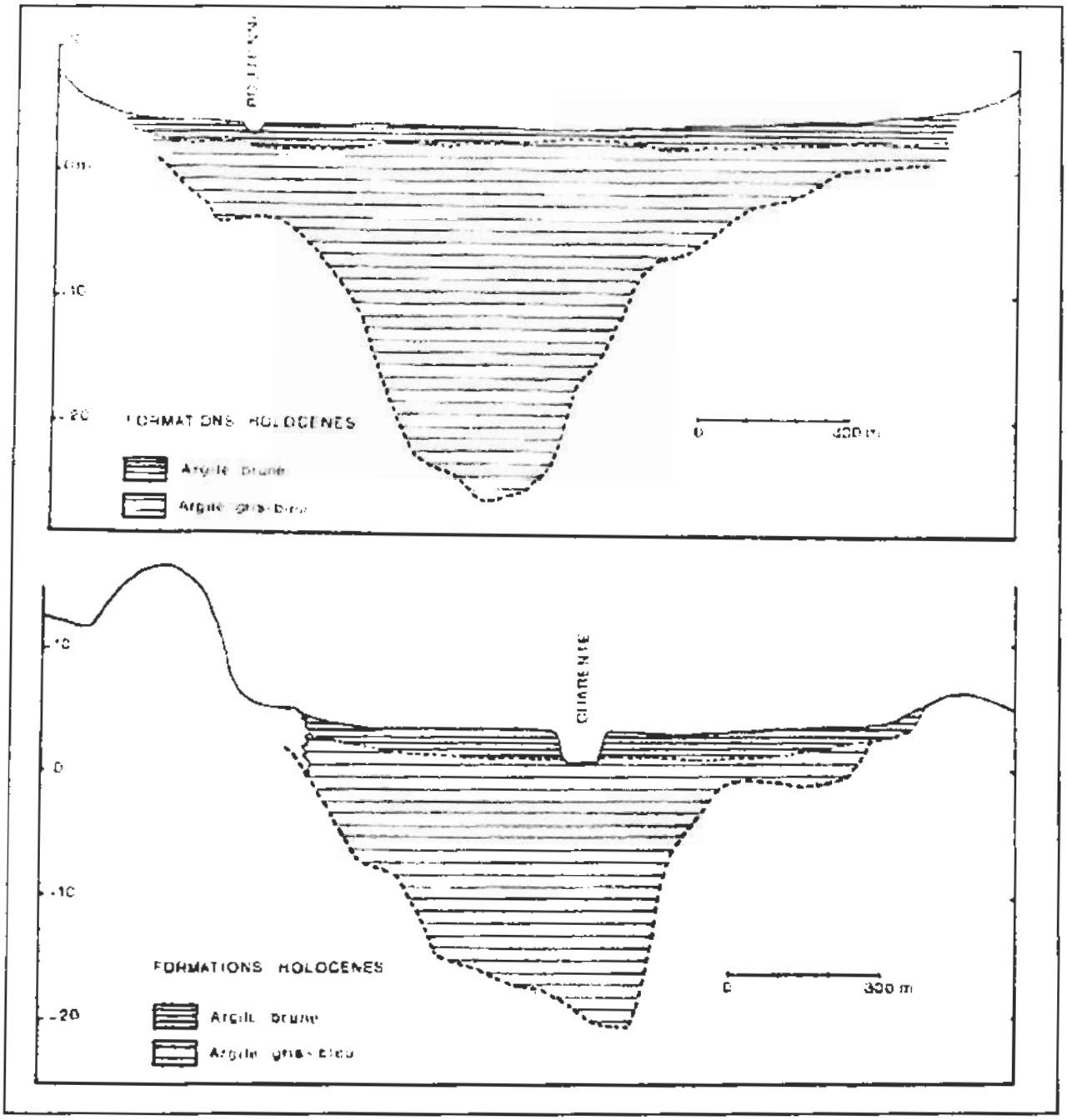

Figure 7.4 . Transverse sections of the valleys of the Boutonne near its confluence with the Charente, and of the Charente in the vicinity of Rochefort (after P. Fouéré 1991).

Majoire point, and the Majoire D 'crescents' (segmentiforms). With the existence of 'diminutive' versions of Malaurie points, Etangs de la Brenière could be the oldest mesolithic site in the region (Gourad 1987, 1992, 1993).

Other open-air sites have yielded epipaleolithic elements in Charente-Maritime and in Deux Sèvres (La Sablière, Bel Air, La Bouronnière). These are inland sites and Azilian points occur in the larger collections. However, more recent mesolithic elements are often found mixed in these assemblages (Blanchet 1987).

The Middle Mesolithic

For the Middle Mesolithic, the data are also imprecise because of the already-noted mixture in assemblages gathered in surface collections. However, it would seem that this stage is (also) characterized by a lithic industry emphasizing scalene and isosceles triangles, and points with and without retouched bases. Percentage differences and a tendency towards more standardization of geometric tool forms, with the introduction of trapezes, could indicate a later phase. It is notable that in all the sites known,

Figure 7.5. Microliths from Etangs de la Brenière (Montbert, Loire-Atlantique) (Gouraud 1992). 1–14 points, 15–29 isosceles triangles, 30–40 scalene triangles, 49–60 transverse base points, 61–67 various microliths.

Sauveterrian points are very rare or non-existent. La Sablière, Bel Air, and Chez Jouneau are representative of this phase in Charente-Maritime (Figs. 7.7-9).

The only reliable chronological indicators for this period are found at the site of La Pierre-Saint-Louis, excavated in 1993 in a salvage operation during the construction of the Saintes-Rochefort highway (A837). This excavation revealed several superimposed occupation surfaces (Middle Mesolithic, Final Mesolithic, Early and Late Neolithic), of which the main one, centered on eight hearths of 'polynesian' type, was determined to be Middle Sauveterrian (ca. 8550 BP). The Late Neolithic dates to ca. 5750 BP (Figs. 7.10-12). These sites are found in the lower Charente basin, but are still rather far from the present coastline (between 20 and 50 km).

Inland, only a single rockshelter site has been excavated and published. It is the Bellefonds site in the Vienne basin, where Patte (1971) defined two large assemblages: (1) a Middle Mesolithic with an industry dominated by scalene triangles (all the types are represented), isosceles triangles, circle segments and triangular (Tardenoisian) points, and (2) a more recent assemblage dominated by trapezes and scalene triangles, amongst which are a single Châtelet point, Sonchamp points and Montbani bladelets. The author notes an intermediate level where the first trapezes appear and above which the percentage representation of the various types is reversed. Not a single Sauveterrian point was found.

The Final Mesolithic

Amongst the sites attributed to the Final Mesolithic, the best known are found along the coast of Vendée. Joussaume proposes a chronocultural outline in two phases: (1) a 'South-Breton' group, independent of the Tardenoisian, and characterized by atypical trapezes (symmetric with concave truncations), numerous scalene triangles with one concave edge, but no isosceles forms (e.g., the site of Point Saint-Gildas). (2) Beginning in the mid-8th millennium BP, another chronocultural group follows the 'South-Breton' group in the same area - the Retzian. This group is characterized by tanged forms (*? - armatures à éperon),* Châtelet points, numerous trapezes and some scalene triangles with their short edges concave (often retouched inversely). Use of the microburin technique is common in Retzian assemblages, and the so-called 'coastal debitage' production mode (flaking on an anvil of small flint pebbles found along the coast) is associated with it. This production modes continues into later periods. The most important Retzian sites are coastal, cliff-edge occupation sites located in Pays de Retz (e.g., Le Châtelet, La Girardière) and on the Vendée coast (e.g., Pointe du Payré) (Figs. 7.13, 7.14).

'Retzian' influence can also be detected at some sites in Deux-Sèvres (e.g., Puy Albert, Lariscot) and Charente-Maritime (Bel Air), signalled by the presence of Châtelet types. Elements attributed to the Late Mesolithic *sensu lato* (principally trapezes) are found at numerous other sites in Charente and Charente-Maritime, but again, these are open sites with mixed industries (some cited above in connection with the Middle Mesolithic) (e.g., Garde-Epée, La Sablière, Bel Air, Chez Jouneau).

The Mesolithic-Neolithic Transition

As for the evolution of the Final Mesolithic toward the earliest phases of neolithization in the region, the Bellefonds rockshelter still remains the reference sequence. According to Patte's excavations (1971), there is a late Mesolithic level there with decorated pottery, seemingly related to the large family of early Neolithic ceramics from southern France and the Iberian Peninsula. The recent resumption of excavations at the shelter by a team headed by Joussaume will, without doubt, provide us with more precise information.

If the presence of potsherds in late mesolithic levels is a rare and equivocal occurrence, some microliths show up in numerous neolithic sites in Vendée, as well as in certain dolmans. Joussaume considers this association in the dolmen of La Pierre Levée (Nieuil-sur-l'Autize) to be the result of mixture after the reoccupation of the mesolithic site by neolithic people. But, more generally, he admits there is a persistence of microlithic technology in the neolithic (Tessier 1984, Joussaume 1984, Joussaume & Tessier 1991). Nevertheless, we do not yet have sufficient, reliable data to define what kinds of microlithic industries continue into the neolithic, nor in what neolithic phases they are represented.

Current Perspectives

During the last 15 years, several regional researchers have conducted surveys in the region of Saintonge and in the Charente basin. We have established contact with them and with M.R. González Morales at the University of Cantabria (Santander, Spain) to try to develop a collaborative research project focused on these periods, and to establish a comparative framework to guide research in France and along the Cantabrian coast (González Morales et al. 1992).

Between 1993 and 1995, about 40 unpublished epipaleolithic or mesolithic sites, of various importance, were recorded. The sites in the maritime zones and those inland present a series of common features. For the most part, they are situated close to water sources (streams, springs), located on low slopes (knolls, hills, former islands) and on well-drained, sandy soils. Only four are located in marsh-edge environments in peats, but given the continuing development of marshy shorelines, and the significant amounts of Holocene deposition, we cannot determine whether these site locations are due to relatively recent advance of the *bri* on earlier, pre-existing sites, or uplifting of underlying sediments caused by draining of the marshes. A program of test excavations should help us to resolve this question.

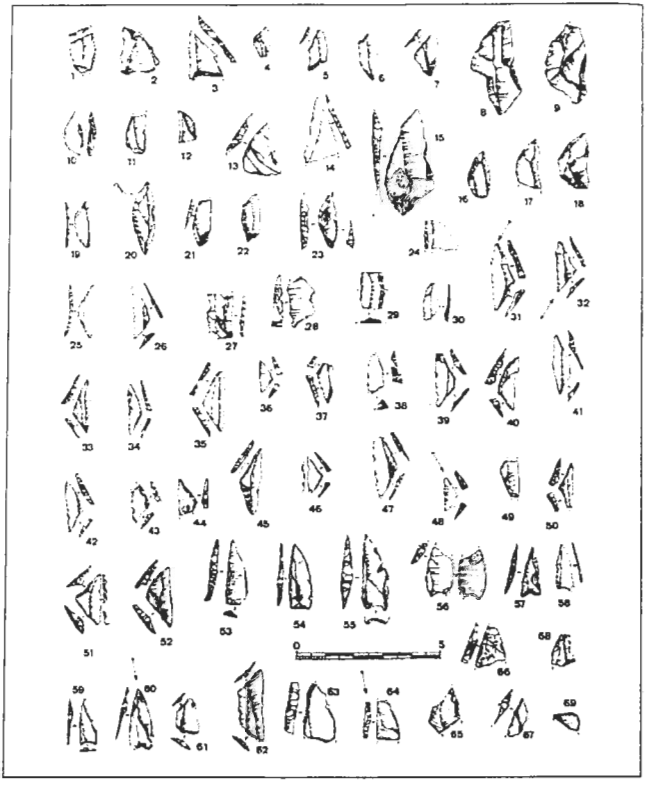

Figure 7.6. Microliths from la Majoire D (Montbert, Loire-Atlantique) (Gouraud 1987). 1–4 broken bladelets on oblique truncations, 5–7, 10 oblique truncated points, 11–15 unilaterally retouched points; 8, 9, 16–18 Chaville points; 19–23 Majoire points; 25, 27 circle segments; 26 asymmetric segment; 24, 28–30 backed bladelet fragments; 31–37 typical scalene triangles; 38, 39 atypical scalene triangles; 40–43 scalene triangles on small concave truncations, 44–52 isosceles triangles, 53 long triangular point, 56–60 concave base Tardenoisian points, 61 short asymmetric trapeze, 62–69 various microliths.

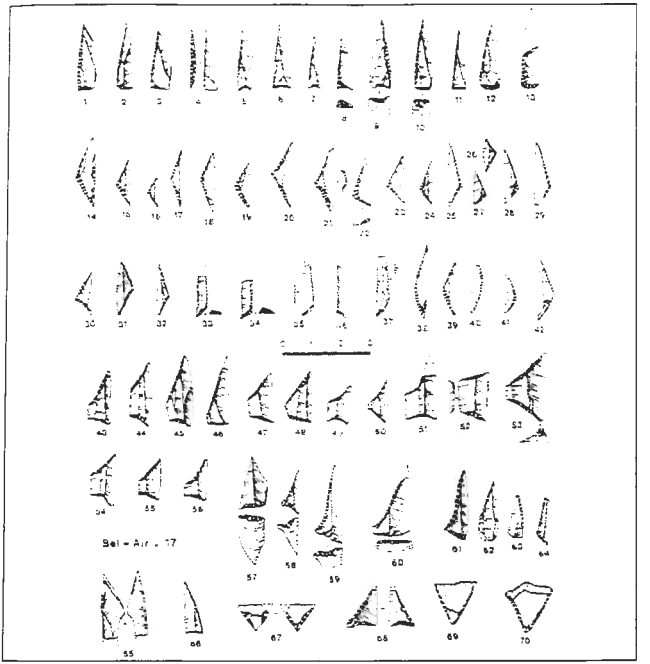

Figure 7.7. Microliths from Bel Air (Villars-les-Bois, Charente-Maritime) (Joussaume 1981). 1–42 pieces typical of the Middle Mesolithic, 43–70 pieces typical of the Final Mesolithic.

Sites closest to the sea or the marshes are located at elevations of 3-27 m. without significant modality in elevation. The inland sites are found at elevations ranging from 20-70 m, with a mode at about 50 m. Most sites face south (S, SW, SE) or east, and are found on tilled land with the exception of those in meadows in the marshes, and the four just mentioned, which were found in commercial sand quarries in wooded areas. Among the surveyed sites, none contained any recognizable structures. They generally consisted of remains dispersed by ploughing (e.g., flint debitage, artifacts, cores etc.).

In the case of the sand quarry sites, the pieces of flint were recovered after sifting the excavated soil, but no occupation surfaces were noted in the stratigraphic sections. It should be noted that the sand quarries concentrate their efforts only on fairly homogeneous sand layers from Cenomanian geological formations, after removing the overlying vegetation, sandy humic and gravel deposits, which are of no commercial value. It is probable that these overlying deposits contain the archaeological remains of interest here.

Most of the sites average 10-200 pieces (various microliths, debitage), but at the Chez Jouneau sand quarry

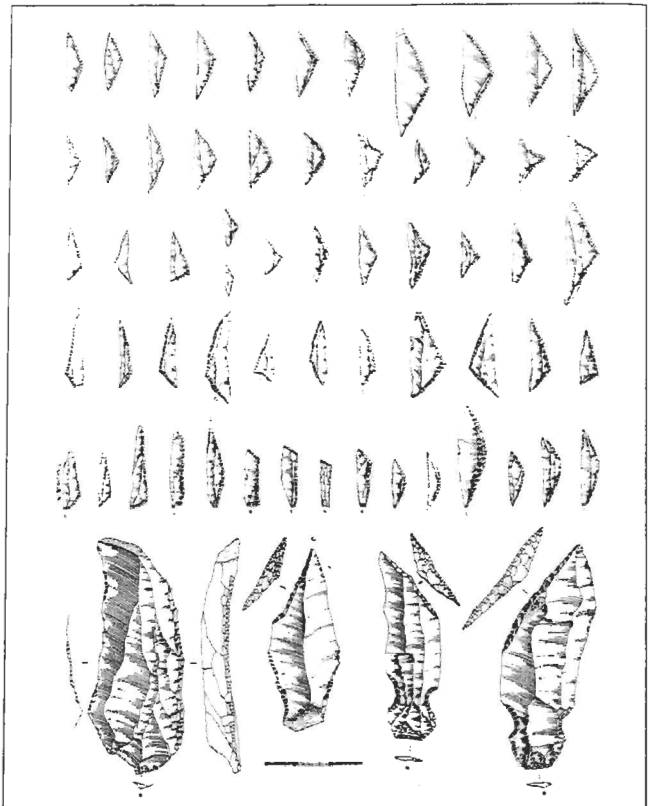

Figure 7.8. Microliths from Chez Jouneau (Brizambourg, Charente-Maritime) (after F. Blanchet). Pieces typical of the Early and Middle Mesolithic.

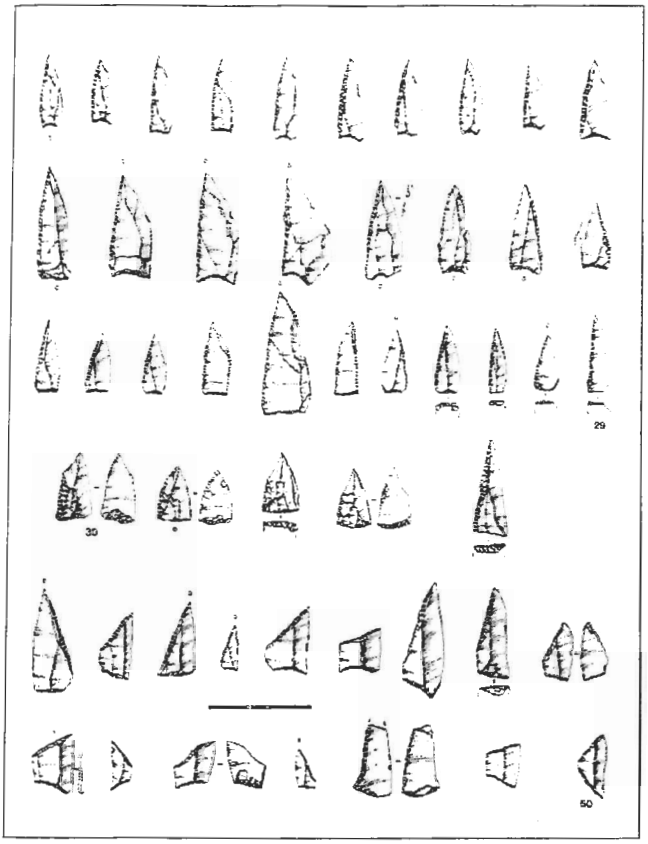

Figure 7.9. Microliths from Chez Jouneau (Brizambourg, Charente-Maritime) (after F. Blanchet). 1–29 pieces typical of the Middle Mesolithic, 30–50 pieces typical of the Final Mesolithic.

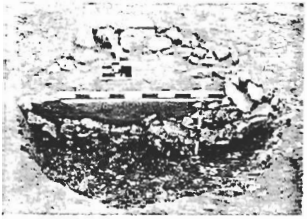

Figure 7.10 'Polynesian' type hearth from the site of La Pierre Saint-Louis, st. 2 sect. VI (8420 ± 110 BP) (P. Foucher excavations).

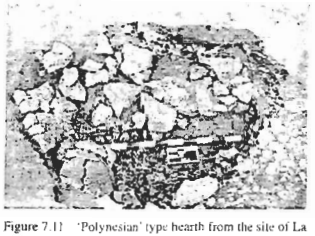

Figure 7.11 'Polynesian' type hearth from the site of La Pierre Saint-Louis, st. 4 sect. VI (7245 ± 70 BP) (P. Foucher excavations).

Figure 7.12 'Polynesian' type hearth from the site of La Pierre Saint-Louis, st. 6 sect. III (8695 ± 95 BP) (P. Foucher excavations).

site (Brizambourg, Charente-Maritime), the Blanchets (1987) found, after screening, some 20,000 flint artifacts (of which 2,000 were microburins and 1,000 various kinds of microliths). The chronological placement of these sites remains a problem. About half the surveyed sites contain artifact types attributed to more than a single period between the Azilian and the Neolithic. In the absence of stratigraphy or datable structures, dating can only be done using typological criteria, with all the ambiguity and imprecision that that involves. Nine sites have yielded Azilian points. Unfortunately, the taphonomic conditions at these open-air sites do not allow for the preservation of bone or antler artifacts (e.g., harpoons, fish hooks) and the rest of the assemblage is not diagnostic (i.e., it cannot be differentiated from the range of Sauveterrian microliths also found at the these sites).

The difficulties just mentioned concerning the identification of Middle Mesolithic sites also apply to current research efforts. At least 10 sites have microlithic assem-

Table 7.1. Radiocarbon dates for the Mesolithic of the Charente-Vendée region.

Saint-Gildas 1b		7 520 ± 140 BP	(Gif 3531)	on shell
Saint-Gildas 1c		6 790 ± 90 BP	(Gif 4847)	on shell
La Pierre St. Louis	St 4 Sect VI	7 245 ± 70 BP	(Ly 147 : AMS)	on charcoal, base of hearth
La Pierre St. Louis	St 2 Sect VI	8 420 ± 110 BP	(Gd 6937)	on charcoal, base of hearth
La Pierre St. Louis	St 6 Sect III	8 695 ± 95 BP	(Ly 116 : AMS)	on charcoal, base of hearth
La Pierre St. Louis	St 15 Sect III	8 765 ± 95 BP	(Ly 117 : AMS)	on charcoal, base of hearth
Bois-Ragot	niv. 3	8 800 ± 220 BP	Azilien (Gif 1588)	charcoal
Bois-Ragot	niv. 4b	10990 ± 160 BP	Azilien (Gif. 3580)	charcoal
Bois-Ragot	niv. 5b	11030 ± 140 BP	Magdalénien final (Gif. 2537)	charcoal
Bois-Ragot	niv. 6	10180 ± 160 BP	Magdalénien final (Gif. 3579)	charcoal

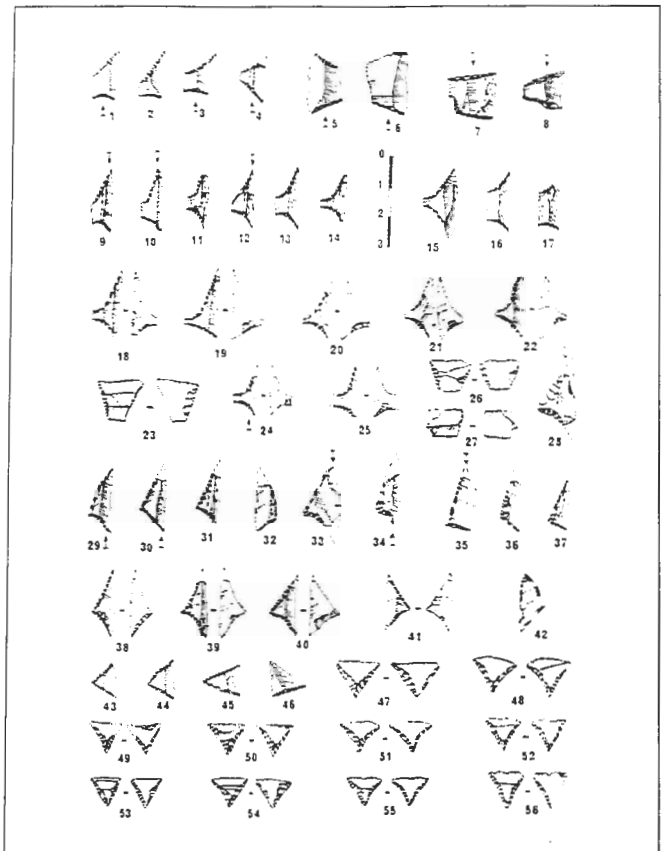

Figure 7.13. Microliths from la Pointe du Payré (Jard-sur-Mer, Vendée) (Joussaume 1981). 1–25 trapèzes, 28–46 triangles; 26, 47–56 Châtelet armatures.

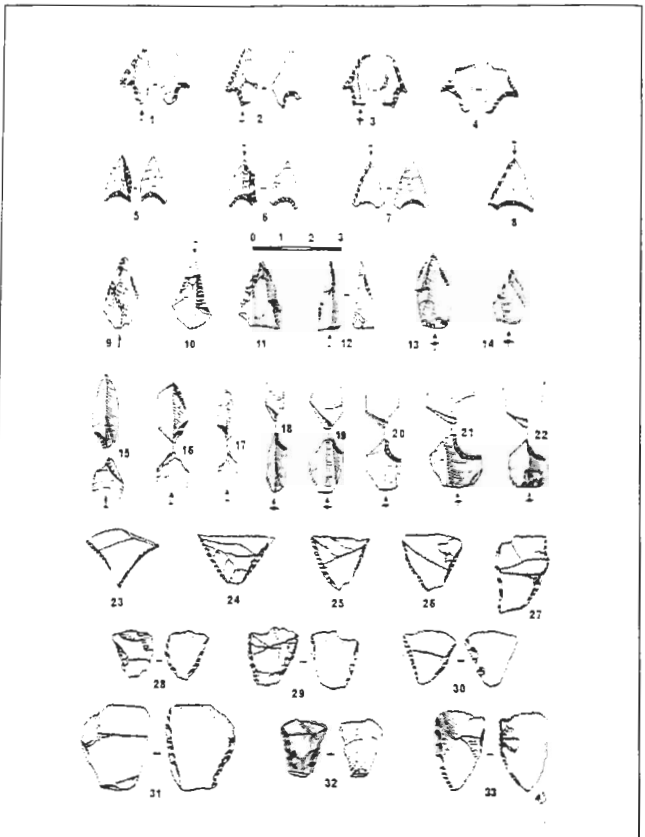

Figure 7.14. Microliths from la Pointe du Payré (Jard-sur-Mer, Vendée) (Joussaume 1981). 1–8 shouldered armatures, 9–14 points 15–22 microburins, 23–33 *armatures à tranchant transversal*.

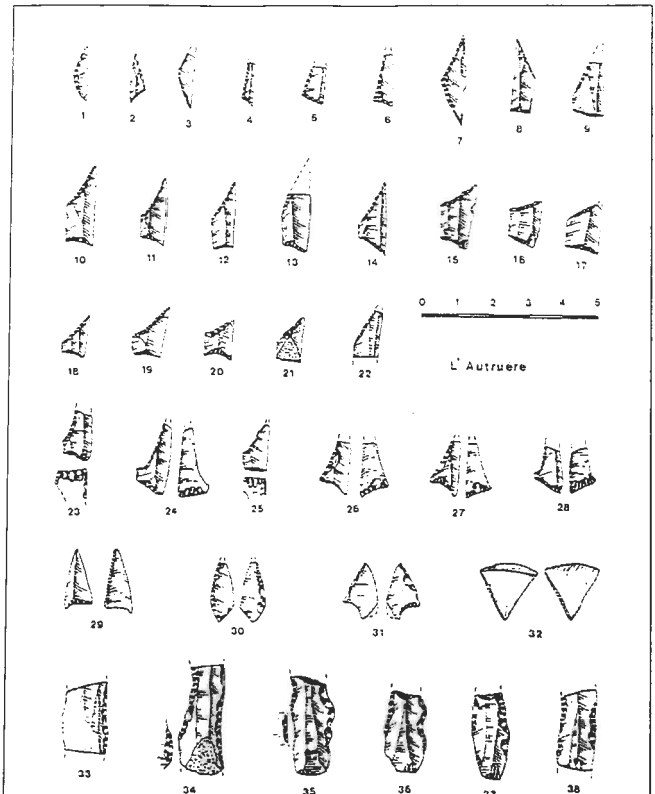

Figure 7.15. Microliths from l'Autruère (Lussant, Charente-Maritime) (Joussaume 1981). Typical pieces from the Final Mesolithic.

blages that can be assigned to the Sauveterrian, and five others to the Final Mesolithic, but these distinctions rest solely on the diversity of the microliths collected, in particular the fortuitous presence or absence of 'index fossil' tool types: trapezes, Châtelet points, tanged pieces (= *armatures à l'éperon?*), as well as the flat retouch typical of the final phases of the mesolithic). On sites where the assemblages are large enough, we can document all the stages of the *chaîne opératoire* from the selection of nuclei to the production and discard of microliths, and the incidence of microburin technique. At some sites, large amounts of debitage could indicate workshops. All the unpublished sites are presently being written up as monographs, and we will have to await their completion before undertaking a detailed, synthetic analysis of these assemblages.

Conclusions

The results of recent work summarized here document an important human occupation of the maritime zones between Sevre Niortaise and the Gironde during the tardiglacial and the beginning of the Holocene. The mapping of the distributions of sites known before and after this preliminary study clearly reveal a new 'territory' to explore, and a much higher density of archaeological remains than expected. Some of these sites were undoubtedly damaged by ploughing or destroyed in the extraction of sand from quarries. But others are clearly more valuable from a scientific point of view, and our efforts will be directed toward investigation of those. The major problem confronting us is to locate an in situ stratigraphic sequence in order to study the diachronic evolution of the industries, and to establish paleoenvironmental reference points.

Following this initial effort at reconstructing the archaeological 'facts' (in which we find ourselves at present), our intention is to construct a diachronic, chronocultural and paleoenvironmental interpretive model for the Tardiglacial on the coast of Charente. Once this is accomplished, we should be in a position to compare this model with the situation in the better-studied but topographically-distinctive region of Cantabria, in the western part of the Gulf of Gascony.

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